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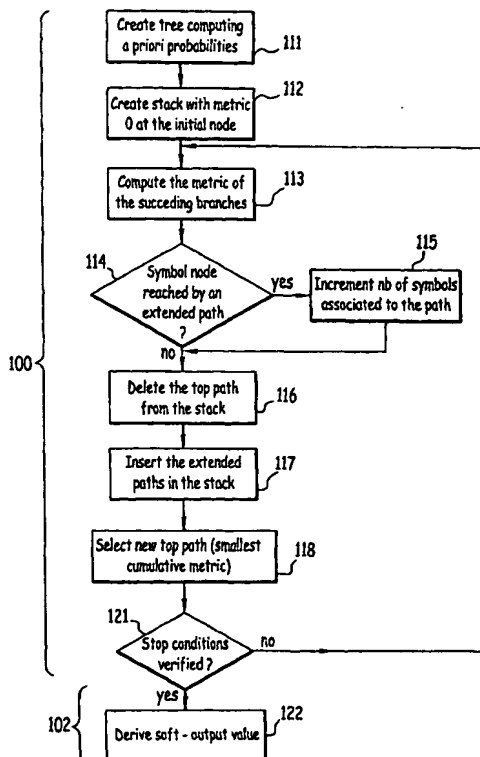
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[Continued on next page]

(54) Title: METHOD END DEVICE FOR SOURCE DECODING A VARIABLE-LENGTH SOFT-INPUT CODEWORDS SEQUENCE

(57) Abstract: The invention concerns a method for source decoding a variable-length soft-input codewords sequence ( $y[1:T]$ ) into a soft-output bit sequence ( $L_v[1:T]$ ), the variable-length soft-input input codewords sequence ( $y[1:T]$ ) encoded in accordance with a VLC codewords table. It comprises- a first stage (100) of implementing a stack decoding algorithm for a sequential estimation of an hard-output bit sequence of said variable length soft-input codewords sequence, including storage of intermediate data contained in the stack and generated by the stack decoding algorithm; and- a second subsequent stage (102) of post-processing the stored intermediate data for generating the soft-output bit sequence ( $L_v[1:T]$ ), a soft-output ( $L(x[t])$ ) being provided for each bit.





ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H03M13/45 H03M7/30 H03M7/40 H03M13/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PERROS-MEILHAC L ET AL: "Huffman tree based metric derivation for a low-complexity sequential soft VLC decoding"</p> <p>ICC 2002. 2002 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS. CONFERENCE PROCEEDINGS. NEW YORK, NY, APRIL 28 - MAY 2, 2002, IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, NEW YORK, NY: IEEE, US, vol. 1 OF 5, 28 April 2002 (2002-04-28), pages 783-787, XP010589600</p> <p>ISBN: 0-7803-7400-2</p> <p>cited in the application</p> <p>the whole document</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	1-4,6-12

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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 Int. Application No  
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